

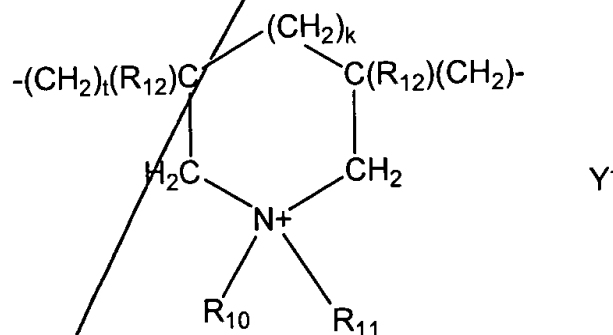
IN THE CLAIMS:

IN THE CLAIMS:

Please replace pending claims 1, 38, 55, 58, 61, 64, 74, 77, 80, 83, 86, and 89^{1 2 3 4 5 6 7 8 9 10 11 12} with amended claims 1, 38, 55, 58, 61, 64, 74, 77, 80, 83, 86, and 89 as follows (a marked-up copy of changes is found in the Appendix of the present amendment):

CHM

1



wherein:

- k and t are each chosen from 0 and 1, with the proviso that the sum of $k + t$ is equal to 1;

- R₁₂, which may be identical or different, are each chosen from hydrogen atoms and methyl groups;

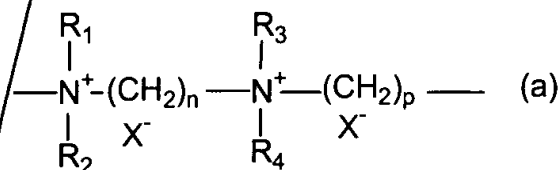
- R₁₀ and R₁₁, which may be identical or different, are each chosen from alkyl groups comprising from 1 to 22 carbon atoms, hydroxyalkyl groups, and C₁-C₄ amidoalkyl groups;

- R₁₀ and R₁₁, together with the nitrogen atom to which they are commonly bonded, may additionally form at least one heterocyclic group;

- Y⁻ is an anion; and

(3) at least one quaternary polyammonium polymer chosen from:

(i) polymers comprising repeating units of formula (a):



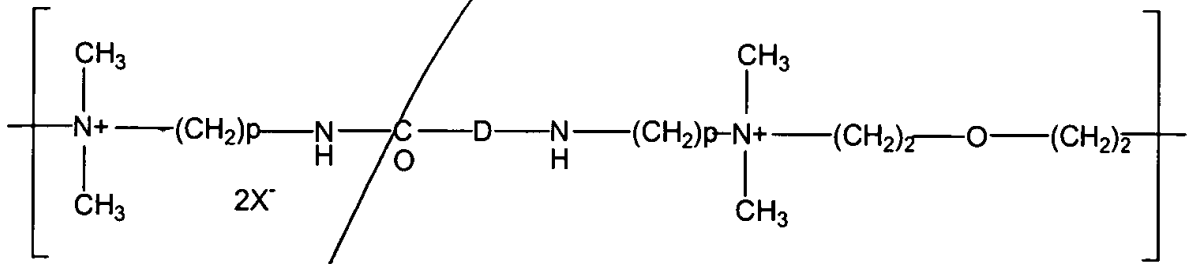
wherein:

- R₁, R₂, R₃ and R₄, which may be identical or different, are each chosen from alkyl groups comprising from 1 to 4 carbon atoms and hydroxyalkyl groups comprising from 1 to 4 carbon atoms;

- n and p, which may be identical or different, are each chosen from integers ranging from 2 to 20; and

- X⁻ is an anion chosen from anions derived from inorganic acids and anions derived from organic acids; and

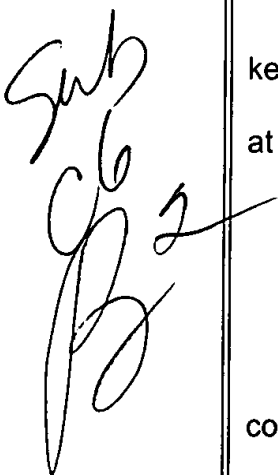
(ii) polyquaternary ammonium polymers comprising repeating units of formula (VIII):



(VIII)

wherein:

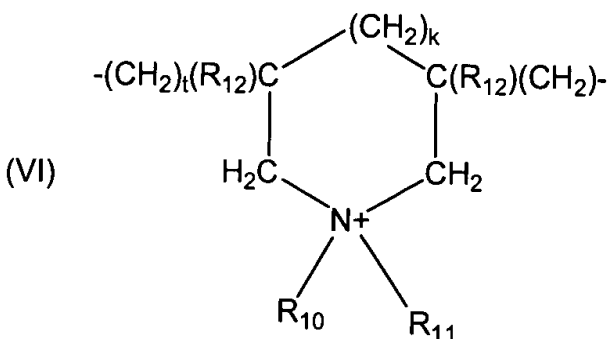
- p is an integer ranging from 1 to 6,
- D is chosen from direct bonds and $-(\text{CH}_2)_r\text{CO}-$ groups, wherein r is a number equal to 4 or 7, and
- X^- is an anion chosen from anions derived from inorganic acids and anions derived from organic acids.


38. (Amended) A ready-to-use cosmetic composition for oxidation dyeing keratin fibers, wherein said ready-to-use cosmetic composition is obtained by including at least one dyeing composition (A) in a dyeing medium, comprising:

- at least one oxidation dye,
- at least one cyclonomopolymer of dialkyldiallylammonium comprising, as a constituent of the chain, at least one unit of structure (VI):

LAW OFFICES

FINNEGAN, HENDERSON,
FARABOW, GARRETT,
& DUNNER, L.L.P.
1300 I STREET, N.W.
WASHINGTON, DC 20005
202-408-4000



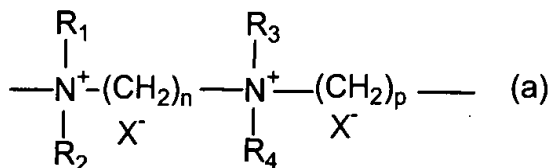
wherein:

- k and t are each chosen from 0 and 1, with the proviso that the sum of k + t is equal to 1;
- R₁₂, which may be identical or different, are each chosen from hydrogen atoms and methyl groups;
- R₁₀ and R₁₁, which may be identical or different, are each chosen from alkyl groups comprising from 1 to 22 carbon atoms, hydroxyalkyl groups, and C₁-C₄ amidoalkyl groups;
- R₁₀ and R₁₁, together with the nitrogen atom to which they are commonly bonded, may additionally form at least one heterocyclic group;
- Y⁻ is an anion; and
- at least one quaternary polyammonium polymer chosen from:

(i) polymers comprising repeating units of formula (a):

LAW OFFICES

FINNEGAN, HENDERSON,
FARABOW, GARRETT,
& DUNNER, L.L.P.
1300 I STREET, N. W.
WASHINGTON, DC 20005
202-408-4000



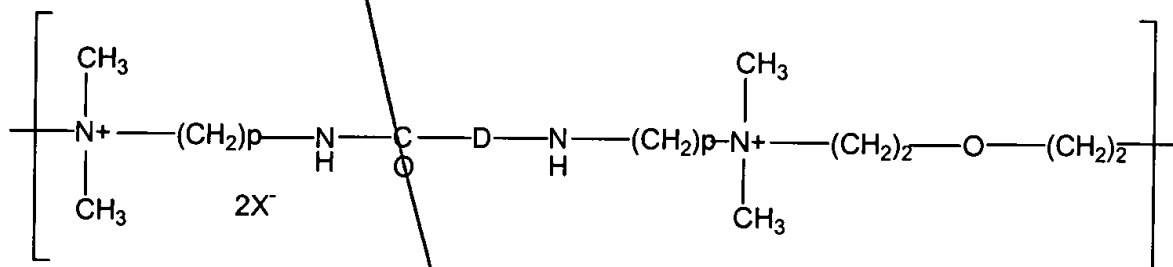
wherein:

- R₁, R₂, R₃ and R₄, which may be identical or different, are each chosen from alkyl groups comprising from 1 to 4 carbon atoms and hydroxyalkyl groups comprising from 1 to 4 carbon atoms;

- n and p, which may be identical or different, are each chosen from integers ranging from 2 to 20; and

- X⁻ is an anion chosen from anions derived from inorganic acids and anions derived from organic acids; and

(ii) polyquaternary ammonium polymers comprising repeating units of formula (VIII):



(VIII)

wherein:

- p is an integer ranging from 1 to 6,

LAW OFFICES

FINNEGAN, HENDERSON,
FARABOW, GARRETT,
& DUNNER, L.L.P.
1300 I STREET, N. W.
WASHINGTON, DC 20005
202-408-4000

B2
PC6

- D is chosen from direct bonds and $-(CH_2)_r-CO-$ groups, wherein r is a number equal to 4 or 7, and

- X⁻ is an anion chosen from anions derived from inorganic acids and anions derived from organic acids, with at least one oxidizing composition (B) comprising at least one oxidizing agent.

Sub
C1

55. (Amended) A method for oxidation dyeing keratin fibers comprising:

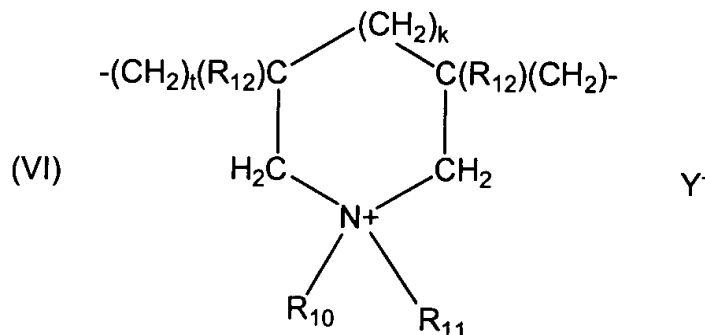
(a) applying to said keratin fibers at least one dyeing composition (A) comprising, in a dyeing medium:

- at least one oxidation dye, and

- a combination comprising:

B3

- (I) at least one cyclohomopolymer of dialkyldiallylammonium comprising, as a constituent of the chain, at least one unit of structure (VI):



wherein:

- k and t are each chosen from 0 and 1, with the proviso that the sum of k + t is equal to 1;

- R₁₂, which may be identical or different, are each chosen from hydrogen atoms and methyl groups;

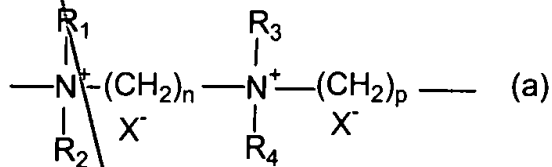
- R₁₀ and R₁₁, which may be identical or different, are each chosen from alkyl groups comprising from 1 to 22 carbon atoms, hydroxyalkyl groups, and C₁-C₄ amidoalkyl groups;

- R₁₀ and R₁₁, together with the nitrogen atom to which they are commonly bonded, may additionally form at least one heterocyclic group;

- Y⁻ is an anion; and

- (II) at least one quaternary polyammonium polymer chosen from:

(i) polymers comprising repeating units of formula (a):



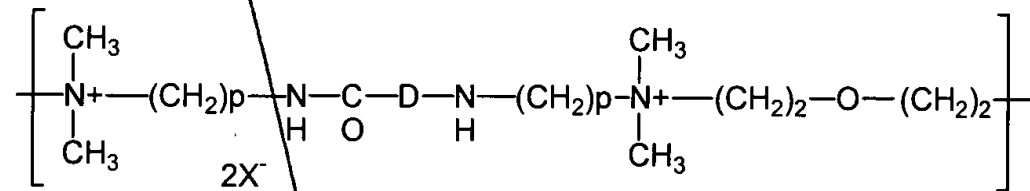
wherein:

- R₁, R₂, R₃ and R₄, which may be identical or different, are each chosen from alkyl groups comprising from 1 to 4 carbon atoms and hydroxyalkyl groups comprising from 1 to 4 carbon atoms;

- n and p, which may be identical or different, are each chosen from integers ranging from 2 to 20; and

- X⁻ is an anion chosen from anions derived from inorganic acids and anions derived from organic acids; and

(ii) polyquaternary ammonium polymers comprising repeating units of formula (VIII):



(VIII)



wherein:

- p is an integer ranging from 1 to 6,

- D is chosen from direct bonds and $-(\text{CH}_2)_r\text{-CO-}$ groups, wherein r is a number equal to 4 or 7, and

- X⁻ is an anion chosen from anions derived from inorganic acids and anions derived from organic acids, and

(b) developing the color with the aid of at least one oxidizing composition (B) comprising at least one oxidizing agent, wherein said at least one oxidizing composition (B) is combined at the time of use with said at least one dyeing composition (A) or said at

least one oxidizing composition (B) is applied sequentially to said at least one dyeing composition (A) without intermediate rinsing.

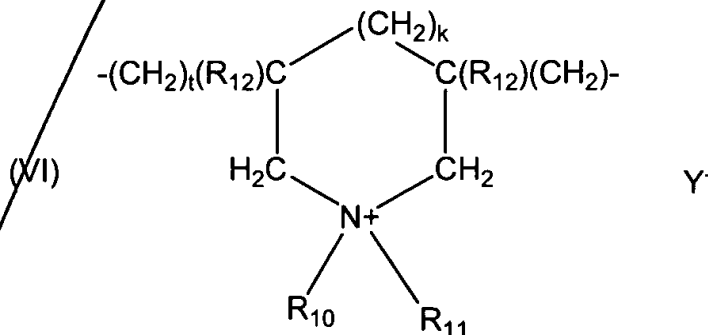
58. (Amended) A method for oxidation dyeing keratin fibers comprising:

(a) applying to said keratin fibers at least one dyeing composition (A) comprising, in a dyeing medium:

- at least one oxidation dye, and

- a combination comprising:

- (I) at least one cyclohomopolymer of dialkyldiallylammonium comprising, as a constituent of the chain, at least one unit of structure (VI):



wherein:

- k and t are each chosen from 0 and 1, with the proviso that the sum of k + t is equal to 1;

- R₁₂, which may be identical or different, are each chosen from hydrogen atoms and methyl groups;

LAW OFFICES

FINNEGAN, HENDERSON,
FARABOW, GARRETT,
& DUNNER, L.L.P.
1300 I STREET, N. W.
WASHINGTON, DC 20005
202-408-4000

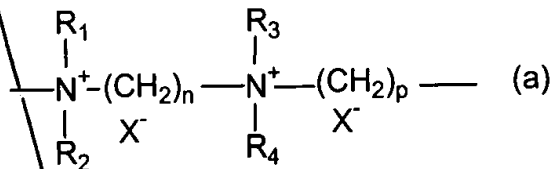
CG
- R₁₀ and R₁₁, which may be identical or different, are each chosen from alkyl groups comprising from 1 to 22 carbon atoms, hydroxyalkyl groups, and C₁-C₄ amidoalkyl groups;

- R₁₀ and R₁₁, together with the nitrogen atom to which they are commonly bonded, may additionally form at least one heterocyclic group;

- Y⁻ is an anion; and

- (II) at least one quaternary polyammonium polymer chosen from:

BF
(i) polymers comprising repeating units of formula (a):



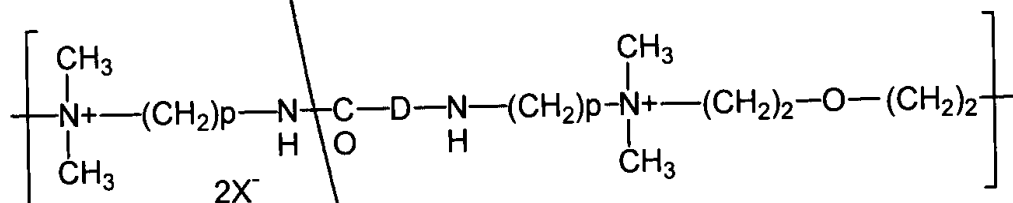
wherein:

- R₁, R₂, R₃ and R₄, which may be identical or different, are each chosen from alkyl groups comprising from 1 to 4 carbon atoms and hydroxyalkyl groups comprising from 1 to 4 carbon atoms;

- n and p, which may be identical or different, are each chosen from integers ranging from 2 to 20; and

CG
- X⁻ is an anion chosen from anions derived from inorganic acids and anions derived from organic acids; and

(ii) polyquaternary ammonium polymers comprising repeating units of formula (VIII):



(VIII)

wherein:

- p is an integer ranging from 1 to 6,
- D is chosen from direct bonds and $-(\text{CH}_2)_r\text{CO}-$ groups, wherein r is a number equal to 4 or 7, and
- X⁻ is an anion chosen from anions derived from inorganic acids and anions derived from organic acids, and

(b) developing the color with the aid of at least one oxidizing composition (B) comprising:

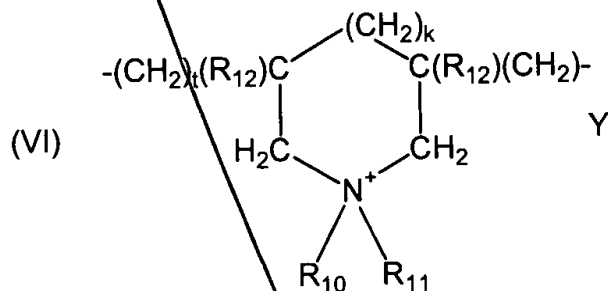
- at least one oxidizing agent, and
- a combination comprising at least one cyclohomopolymer of dialkyldiallylammonium as defined above and at least one other quaternary polyammonium as defined above,

B4
C

- wherein said at least one oxidizing composition (B) is combined at the time of use with said at least one dyeing composition (A) or said at least one oxidizing composition (B) is applied sequentially to said at least one dyeing composition (A) without intermediate rinsing.

61. (Amended) A method for oxidation dyeing keratin fibers comprising:

- Sub
C9
- applying to said keratin fibers at least one dyeing composition (A) comprising, in a dyeing medium, at least one oxidation dye,
- developing the color with the aid of at least one oxidizing composition (B) comprising at least one oxidizing agent,
- wherein said oxidizing composition (B) comprises a combination comprising:
- (I) at least one cyclohomopolymer of dialkyldiallylammonium comprising, as a constituent of the chain, at least one unit of structure (VI):
- B5



wherein:

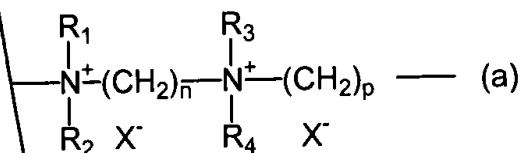
- k and t are each chosen from 0 and 1, with the proviso that the sum of k + t is equal to 1;

- cg
- R₁₂, which may be identical or different, are each chosen from hydrogen atoms and methyl groups;
 - R₁₀ and R₁₁, which may be identical or different, are each chosen from alkyl groups comprising from 1 to 22 carbon atoms, hydroxyalkyl groups, and C₁-C₄ amidoalkyl groups;
 - R₁₀ and R₁₁, together with the nitrogen atom to which they are commonly bonded, may additionally form at least one heterocyclic group;
 - Y⁻ is an anion; and

B5

- (II) at least one quaternary polyammonium polymer chosen from:

(i) polymers comprising repeating units of formula (a):



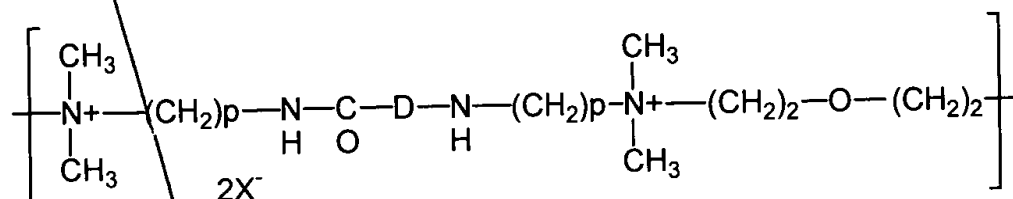
wherein:

- R₁, R₂, R₃ and R₄, which may be identical or different, are each chosen from alkyl groups comprising from 1 to 4 carbon atoms and hydroxyalkyl groups comprising from 1 to 4 carbon atoms;

- n and p, which may be identical or different, are each chosen from integers ranging from 2 to 20; and

- X⁻ is an anion chosen from anions derived from inorganic acids and anions derived from organic acids; and

(ii) polyquaternary ammonium polymers comprising repeating units of formula (VIII):



(VIII)

wherein:

- p is an integer ranging from 1 to 6,
- D is chosen from direct bonds and $-(\text{CH}_2)_r\text{CO}-$ groups, wherein r is a number equal to 4 or 7, and
- X⁻ is an anion chosen from anions derived from inorganic acids and anions derived from organic acids,
- wherein said at least one oxidizing composition (B) is combined at the time of use with said at least one dyeing composition (A) or wherein said at least one oxidizing composition (B) is applied sequentially to said at least one dyeing composition (A) without intermediate rinsing.

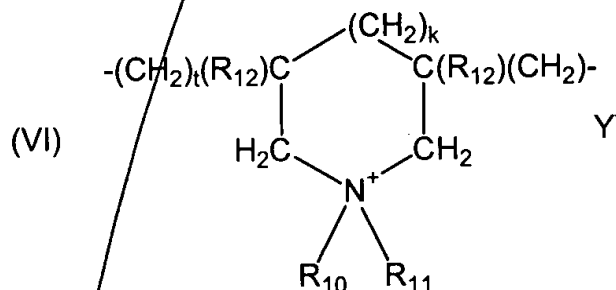
64. (Amended)

A kit for dyeing keratin fibers comprising at least two compartments, wherein:

C¹⁰

- a first compartment comprises at least one oxidation dye and a combination comprising:

(I) at least one cyclohomopolymer of dialkyldiallylammonium comprising, as a constituent of the chain, at least one unit of structure (VI):



B⁶

wherein:

- k and t are each chosen from 0 and 1, with the proviso that the sum of k + t is equal to 1;

- R₁₂, which may be identical or different, are each chosen from hydrogen atoms and methyl groups;

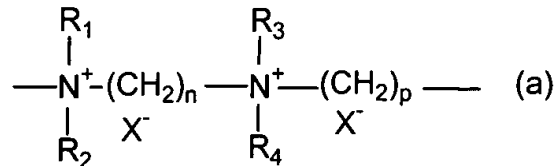
- R₁₀ and R₁₁, which may be identical or different, are each chosen from alkyl groups comprising from 1 to 22 carbon atoms, hydroxyalkyl groups, and C₁-C₄ amidoalkyl groups;

- R₁₀ and R₁₁, together with the nitrogen atom to which they are commonly bonded, may additionally form at least one heterocyclic group;

- Y⁻ is an anion; and

(II) at least one quaternary polyammonium polymer chosen from:

(i) polymers comprising repeating units of formula (a):



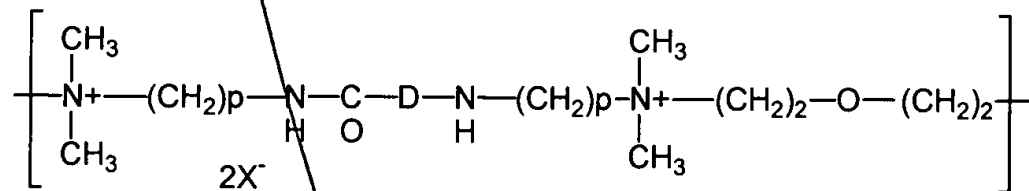
wherein:

- R₁, R₂, R₃ and R₄, which may be identical or different, are each chosen from alkyl groups comprising from 1 to 4 carbon atoms and hydroxyalkyl groups comprising from 1 to 4 carbon atoms;

- n and p, which may be identical or different, are each chosen from integers ranging from 2 to 20; and

- X⁻ is an anion chosen from anions derived from inorganic acids and anions derived from organic acids; and

(ii) polyquaternary ammonium polymers comprising repeating units of formula (VIII):



(VIII)

C12
B6
wherein:

- p is an integer ranging from 1 to 6,
- D is chosen from direct bonds and $-(CH_2)_r-CO-$ groups, wherein r is a number equal to 4 or 7, and
- X⁻ is an anion chosen from anions derived from inorganic acids and anions derived from organic acids, and
- a second compartment comprises at least one oxidizing agent.

Sub
C12
B7
74. (Amended) A method for oxidation dyeing keratin fibers comprising:

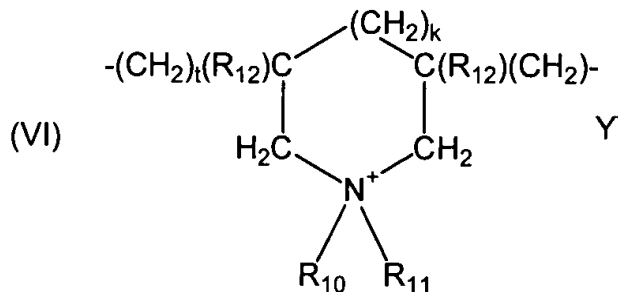
(a) applying to said keratin fibers at least one dyeing composition (A) comprising, in a dyeing medium:

- at least one oxidation dye, and

(b) developing the color with the aid of at least one oxidizing composition (B) comprising at least one oxidizing agent, wherein said at least one oxidizing composition (B) is combined at the time of use with said at least one dyeing composition (A) or said at least one oxidizing composition (B) is applied sequentially to said at least one dyeing composition (A) without intermediate rinsing, wherein:

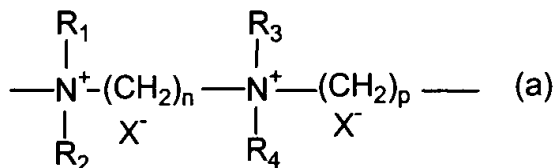
- (i) said at least one dyeing composition (A) comprises:

- at least one cyclohomopolymer of dialkyldiallylammonium comprising, as a constituent of the chain, at least one unit of structure (VI):



wherein:

- k and t are each chosen from 0 and 1, with the proviso that the sum of k + t is equal to 1;
- R₁₂, which may be identical or different, are each chosen from hydrogen atoms and methyl groups;
- R₁₀ and R₁₁, which may be identical or different, are each chosen from alkyl groups comprising from 1 to 22 carbon atoms, hydroxyalkyl groups, and C₁-C₄ amidoalkyl groups;
- R₁₀ and R₁₁, together with the nitrogen atom to which they are commonly bonded, may additionally form at least one heterocyclic group;
- Y⁻ is an anion; and wherein:
- (II) said at least one oxidizing composition (B) comprises:
 - at least one quaternary polyammonium polymer chosen from:
 - (i) polymers comprising repeating units of formula (a):



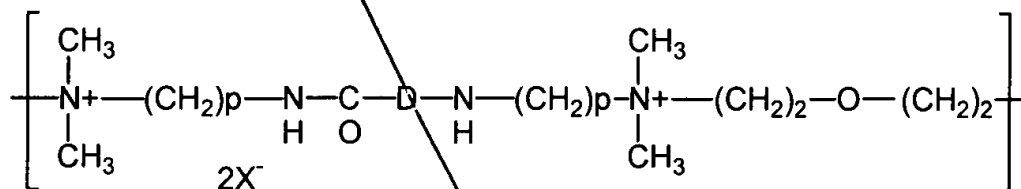
wherein:

- R₁, R₂, R₃ and R₄, which may be identical or different, are each chosen from alkyl groups comprising from 1 to 4 carbon atoms and hydroxyalkyl groups comprising from 1 to 4 carbon atoms;

- n and p, which may be identical or different, are each chosen from integers ranging from 2 to 20; and

- X⁻ is an anion chosen from anions derived from inorganic acids and anions derived from organic acids; and

- (ii) polyquaternary ammonium polymers comprising repeating units of formula (VIII):



(VIII)

wherein:

- p is an integer ranging from 1 to 6,

LAW OFFICES

FINNEGAN, HENDERSON,
 FARABOW, GARRETT,
 & DUNNER, L.L.P.
 1300 I STREET, N. W.
 WASHINGTON, DC 20005
 202-408-4000

B7C
- D is chosen from direct bonds and $-(CH_2)_r-CO-$ groups, wherein r is a number equal to 4 or 7, and

- X⁻ is an anion chosen from anions derived from inorganic acids and anions derived from organic acids.

Sub CTS
B8
77. (Amended)

A method for oxidation dyeing keratin fibers comprising:

(a) applying to said keratin fibers at least one dyeing composition (A) comprising, in a dyeing medium:

- at least one oxidation dye, and

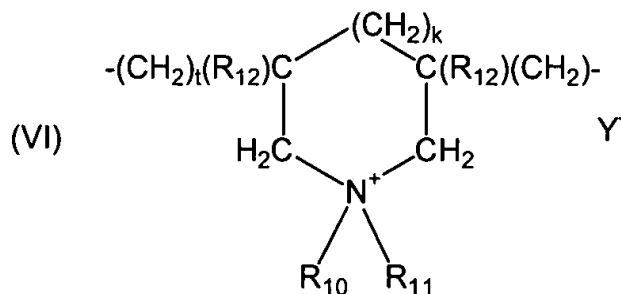
(b) developing the color with the aid of at least one oxidizing composition (B) comprising at least one oxidizing agent, wherein said at least one oxidizing composition (B) is combined at the time of use with said at least one dyeing composition (A) or said at least one oxidizing composition (B) is applied sequentially to said at least one dyeing composition (A) without intermediate rinsing, wherein:

- (I) said at least one oxidizing composition (B) comprises:

- at least one cyclohomopolymer of dialkyldiallylammonium comprising, as a constituent of the chain, at least one unit of structure (VI):

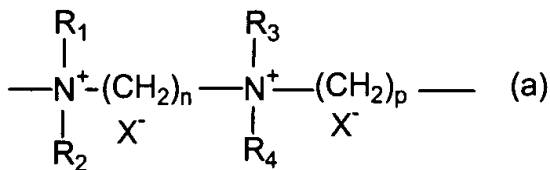
LAW OFFICES

FINNEGAN, HENDERSON,
FARABOW, GARRETT,
& DUNNER, L.L.P.
1300 I STREET, N. W.
WASHINGTON, DC 20005
202-408-4000



wherein:

- k and t are each chosen from 0 and 1, with the proviso that the sum of k + t is equal to 1;
- R₁₂, which may be identical or different, are each chosen from hydrogen atoms and methyl groups;
- R₁₀ and R₁₁, which may be identical or different, are each chosen from alkyl groups comprising from 1 to 22 carbon atoms, hydroxyalkyl groups, and C₁-C₄ amidoalkyl groups;
- R₁₀ and R₁₁, together with the nitrogen atom to which they are commonly bonded, may additionally form at least one heterocyclic group;
- Y⁻ is an anion; and wherein:
- (II) said at least one dyeing composition (A) comprises:
 - at least one quaternary polyammonium polymer chosen from:
 - (i) polymers comprising repeating units of formula (a):



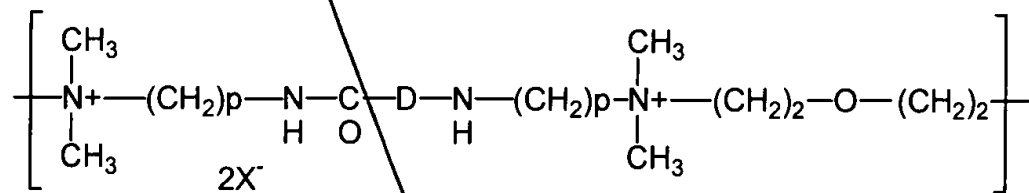
wherein:

- R₁, R₂, R₃ and R₄, which may be identical or different, are each chosen from alkyl groups comprising from 1 to 4 carbon atoms and hydroxyalkyl groups comprising from 1 to 4 carbon atoms;

- n and p, which may be identical or different, are each chosen from integers ranging from 2 to 20; and

- X⁻ is an anion chosen from anions derived from inorganic acids and anions derived from organic acids; and

- (ii) polyquaternary ammonium polymers comprising repeating units of formula (VIII):



(VIII)

wherein:

- p is an integer ranging from 1 to 6,

- D is chosen from direct bonds and $-(CH_2)_r-CO-$ groups, wherein r is a number equal to 4 or 7, and

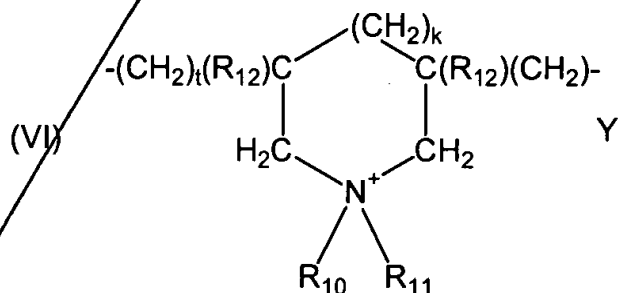
- X^- is an anion chosen from anions derived from inorganic acids and anions derived from organic acids.

80. (Amended) A kit for dyeing keratin fibers comprising at least two compartments, wherein:

- a first compartment comprises at least one oxidation dye and

- a second compartment comprises at least one oxidizing agent and a combination comprising:

(I) at least one cyclohomopolymer of dialkyldiallylammonium comprising, as a constituent of the chain, at least one unit of structure (VI):



wherein:

- k and t are each chosen from 0 and 1, with the proviso that the sum of k + t is equal to 1;

3

- R₁₂, which may be identical or different, are each chosen from hydrogen atoms and methyl groups;

- R₁₀ and R₁₁, which may be identical or different, are each chosen from alkyl groups comprising from 1 to 22 carbon atoms, hydroxyalkyl groups, and C₁-C₄ amidoalkyl groups;

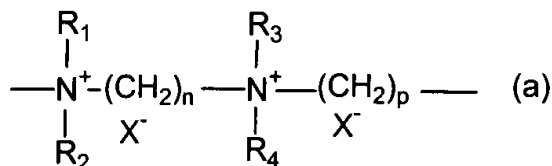
- R₁₀ and R₁₁, together with the nitrogen atom to which they are commonly bonded, may additionally form at least one heterocyclic group;

- Y⁻ is an anion; and

(II) at least one quaternary polyammonium polymer chosen from:

B9

(i) polymers comprising repeating units of formula (a):



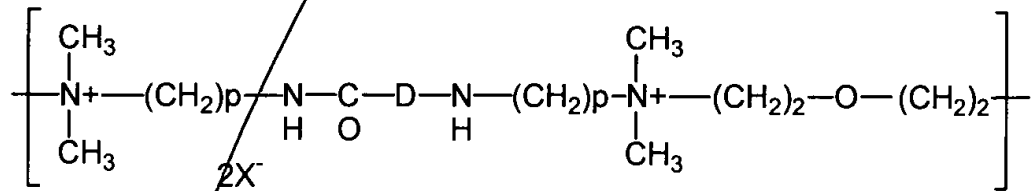
wherein:

- R₁, R₂, R₃ and R₄, which may be identical or different, are each chosen from alkyl groups comprising from 1 to 4 carbon atoms and hydroxyalkyl groups comprising from 1 to 4 carbon atoms;

- n and p, which may be identical or different, are each chosen from integers ranging from 2 to 20; and

- X⁻ is an anion chosen from anions derived from inorganic acids and anions derived from organic acids; and

(ii) polyquaternary ammonium polymers comprising repeating units of formula (VIII):



(VIII)

wherein:

- p is an integer ranging from 1 to 6,

- D is chosen from direct bonds and $-(\text{CH}_2)_r\text{CO}-$ groups, wherein r is a number equal to 4 or 7, and

- X⁻ is an anion chosen from anions derived from inorganic acids and anions derived from organic acids.

83. (Amended) A kit for dyeing keratin fibers comprising at least two compartments, wherein:

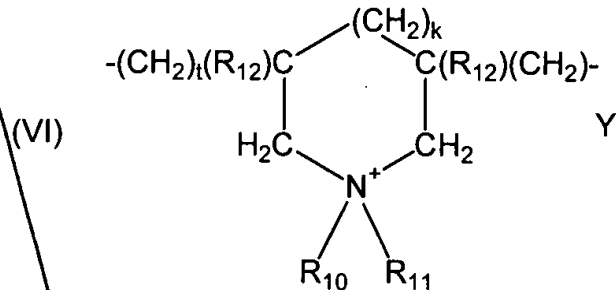
- a first compartment comprises at least one oxidation dye and a combination comprising:

LAW OFFICES

FINNEGAN, HENDERSON,
FARABOW, GARRETT,
& DUNNER, L.L.P.
1300 I STREET, N. W.
WASHINGTON, DC 20005
202-408-4000

CH
B10

(I) at least one cyclohomopolymer of dialkyldiallylammonium comprising, as a constituent of the chain, at least one unit of structure (VI):



wherein:

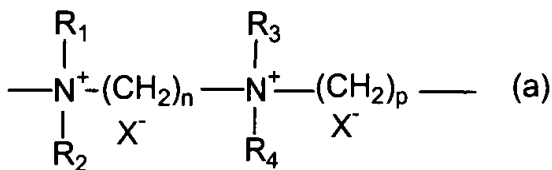
- k and t are each chosen from 0 and 1, with the proviso that the sum of k + t is equal to 1;
- R₁₂, which may be identical or different, are each chosen from hydrogen atoms and methyl groups;
- R₁₀ and R₁₁, which may be identical or different, are each chosen from alkyl groups comprising from 1 to 22 carbon atoms, hydroxyalkyl groups, and C₁-C₄ amidoalkyl groups;
- R₁₀ and R₁₁, together with the nitrogen atom to which they are commonly bonded, may additionally form at least one heterocyclic group;
- Y⁻ is an anion; and

(II) at least one quaternary polyammonium polymer chosen from:

(i) polymers comprising repeating units of formula (a):

LAW OFFICES

FINNEGAN, HENDERSON,
FARABOW, GARRETT,
& DUNNER, L.L.P.
1300 I STREET, N. W.
WASHINGTON, DC 20005
202-408-4000



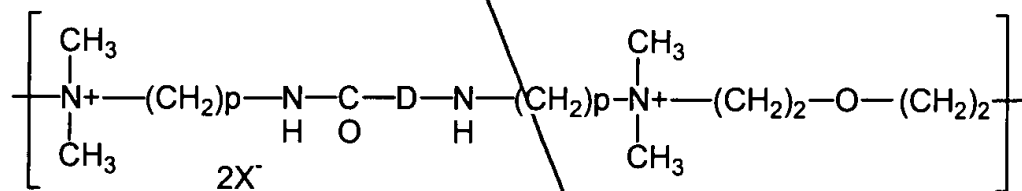
wherein:

- R₁, R₂, R₃ and R₄, which may be identical or different, are each chosen from alkyl groups comprising from 1 to 4 carbon atoms and hydroxyalkyl groups comprising from 1 to 4 carbon atoms;

- n and p, which may be identical or different, are each chosen from integers ranging from 2 to 20; and

- X⁻ is an anion chosen from anions derived from inorganic acids and anions derived from organic acids; and

(ii) polyquaternary ammonium polymers comprising repeating units of formula (VIII):



(VIII)

wherein:

- p is an integer ranging from 1 to 6,

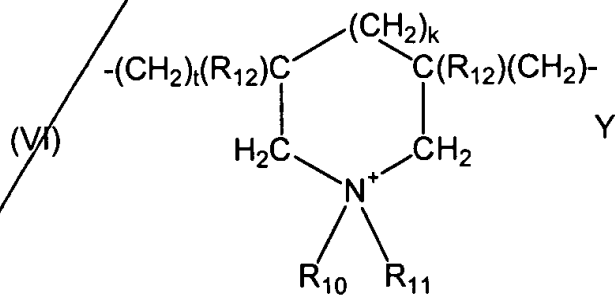
LAW OFFICES

FINNEGAN, HENDERSON,
 FARABOW, GARRETT,
 & DUNNER, L.L.P.
 1300 I STREET, N.W.
 WASHINGTON, DC 20005
 202-408-4000

- CH
B10
- D is chosen from direct bonds and $-(CH_2)_r-CO-$ groups, wherein r is a number equal to 4 or 7, and
 - X⁻ is an anion chosen from anions derived from inorganic acids and anions derived from organic acids, and
 - a second compartment comprises at least one oxidizing agent and a combination comprising at least one cyclohomopolymer of dialkyldiallylammonium as defined above and at least one other quaternary polyammonium polymer as defined above.

86. (Amended) A kit for dyeing keratin fibers comprising at least two compartments, wherein:

- Sub
C15
- a first compartment comprises at least one oxidation dye and at least one cyclohomopolymer of dialkyldiallylammonium comprising, as a constituent of the chain, at least one unit of structure (VI):



wherein:

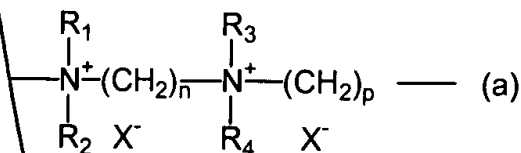
- k and t are each chosen from 0 and 1, with the proviso that the sum of k + t is equal to 1;

- CP
- R₁₂, which may be identical or different, are each chosen from hydrogen atoms and methyl groups;
 - R₁₀ and R₁₁, which may be identical or different, are each chosen from alkyl groups comprising from 1 to 22 carbon atoms, hydroxyalkyl groups, and C₁-C₄ amidoalkyl groups;
 - R₁₀ and R₁₁, together with the nitrogen atom to which they are commonly bonded, may additionally form at least one heterocyclic group;
 - Y⁻ is an anion, and wherein:

BH

- a second compartment comprises at least one oxidizing agent and at least one quaternary polyammonium polymer chosen from:

(i) polymers comprising repeating units of formula (a):

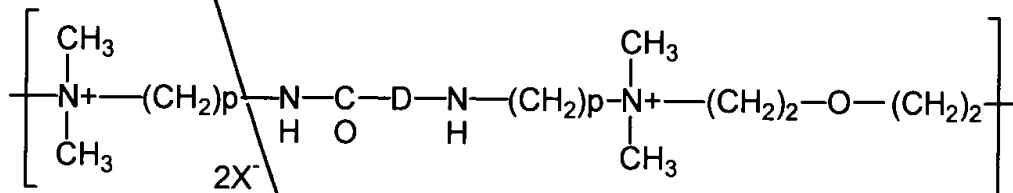


wherein:

- R₁, R₂, R₃ and R₄, which may be identical or different, are each chosen from alkyl groups comprising from 1 to 4 carbon atoms and hydroxyalkyl groups comprising from 1 to 4 carbon atoms;
- n and p, which may be identical or different, are each chosen from integers ranging from 2 to 20; and

5
- X⁻ is an anion chosen from anions derived from inorganic acids and anions derived from organic acids; and

(ii) polyquaternary ammonium polymers comprising repeating units of formula (VIII):



(VIII)

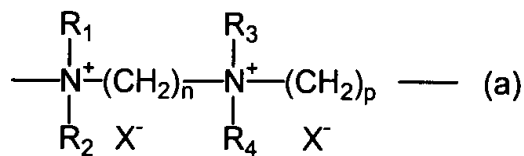
wherein:

- B¹¹
- p is an integer ranging from 1 to 6,
 - D is chosen from direct bonds and $-(\text{CH}_2)_r\text{-CO}-$ groups, wherein r is a number equal to 4 or 7, and
 - X⁻ is an anion chosen from anions derived from inorganic acids and anions derived from organic acids.

89. (Amended) A kit for dyeing keratin fibers comprising at least two compartments, wherein:

- a first compartment comprises at least one oxidation dye and at least one quaternary polyammonium polymer chosen from:

(i) polymers comprising repeating units of formula (a):



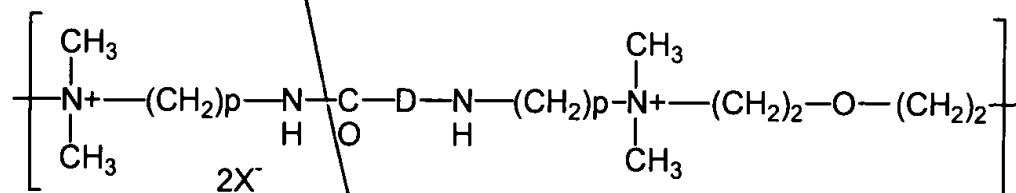
wherein:

- R₁, R₂, R₃ and R₄, which may be identical or different, are each chosen from alkyl groups comprising from 1 to 4 carbon atoms and hydroxyalkyl groups comprising from 1 to 4 carbon atoms;

- n and p, which may be identical or different, are each chosen from integers ranging from 2 to 20; and

- X⁻ is an anion chosen from anions derived from inorganic acids and anions derived from organic acids; and

(ii) polyquaternary ammonium polymers comprising repeating units of formula (VIII):



(VIII)

wherein:

- p is an integer ranging from 1 to 6,

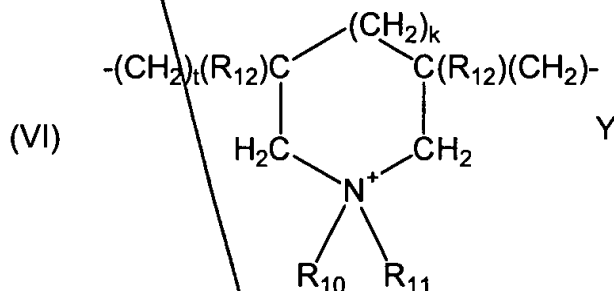
FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

- D is chosen from direct bonds and $-(CH_2)_r-CO-$ groups, wherein r is a number equal to 4 or 7, and

- X^- is an anion chosen from anions derived from inorganic acids and anions derived from organic acids, and wherein:

- a second compartment comprises at least one oxidizing agent and at least one cyclohomopolymer of dialkyldiallylammonium comprising, as a constituent of the chain, at least one unit of structure (VI):



wherein:

- k and t are each chosen from 0 and 1, with the proviso that the sum of k + t is equal to 1;

- R_{12} , which may be identical or different, are each chosen from hydrogen atoms and methyl groups;

- R_{10} and R_{11} , which may be identical or different, are each chosen from alkyl groups comprising from 1 to 22 carbon atoms, hydroxyalkyl groups, and C_1-C_4 amidoalkyl groups;

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com